IN THE CLAIMS

1. (Currently Amended) A method of coating a gas turbine blade with a metallic anti-oxidation coating in a vacuum plant, comprising:

heating the gas turbine blade while in a vacuum in the vacuum plant, from room temperature to a gas turbine blade temperature,

applying the metallic anti-oxidation coating to the gas turbine blade while in a vacuum, the anti-oxidation coating being applied in a coating region of the vacuum plant, and the application of the anti-oxidation coating causes the temperature of the gas turbine blade to drop, but not to a room temperature level, and

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subjecting the coated gas turbine blade to a postheat treatment while in a vacuum, wherein the postheat treatment follows the application of the coating in such a way that the temperature of the gas turbine blade, after the application of the coating and before the postheat treatment, is at least equal to a minimum temperature, the minimum temperature being ~~relatively~~ higher than room temperature, and includes transferring the coated gas turbine blade from the coating region to a postheat region of the vacuum plant.

2. (Previously Amended) The method as claimed in claim 1, wherein the minimum temperature is about 500 K.

3. (Currently Amended) The method as claimed in claim 1, wherein ~~the application of the metallic coating to the gas turbine blade is effected in a coating region of the vacuum plant and the postheat treatment is effected in a postheat treatment region of the vacuum plant,~~ the coating region and the postheat treatment region ~~being~~ are different regions of the vacuum plant.

4. (Previously Amended) The method as claimed in claim 3, wherein the coated gas turbine blade is automatically transferred from the coating region into the postheat treatment region.

5. (Previously Amended) The method as claimed in claim 1, further comprising:

cooling down the gas turbine blade subjected to postheat treatment, to room temperature in a controlled manner.

6. (Currently Amended) The method as claimed in claim 3, wherein a first number of gas turbine blades is located in the coating region and ~~nearly~~ simultaneously, a second number of gas turbine blades is located in the postheat treatment region, the second number being larger than the first number.

7. (Previously Amended) The method as claimed in claim 1, wherein a material used for the gas turbine blade is one of a nickel-, iron-, or cobalt-base superalloy.

8. (Previously Amended) The method as claimed in claim 1, wherein the metallic anti-oxidation coating is an MCrAlX alloy, where M stands for one or more elements of the group including iron, cobalt and nickel; Cr stands for chromium; Al stands for aluminum; and X stands for one or more elements of the group including yttrium, rhenium and the elements of the rare earths.

9. (Currently Amended) An apparatus for coating a gas turbine blade with a metallic anti-oxidation coating in a vacuum plant, comprising:

a coating chamber; and

a postheat treatment chamber, wherein the postheat treatment chamber is connected to the coating chamber, and both chambers are maintained in a vacuum ~~in a vacuum-tight manner~~.

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10. (Previously Amended) The apparatus as claimed in claim 9, wherein a heating device is provided in the postheat treatment chamber.

11. (Previously Amended) The apparatus as claimed in claim 9, further comprising:

a preheating chamber, the preheating chamber being arranged upstream of the coating chamber and being connected to the coating chamber in a vacuum-tight manner.

12. (Previously Amended) The apparatus as claimed in claim 9, further comprising:

a cooling chamber, the cooling chamber being arranged downstream of the postheat treatment chamber and being connected to the postheat treatment chamber in a vacuum-tight manner.

13. (Currently Amended) The apparatus as claimed in claim 9, wherein the ~~vacuum-tight~~ connection between the coating chamber and the postheat treatment chamber is produced via a lock chamber.

14. (Previously Amended) The apparatus as claimed in claim 13, wherein a heating device is provided in the lock chamber.

15. (Previously Amended) The apparatus as claimed in claim 9, further comprising:

a transfer system for the automatic transfer of the gas turbine blade from one chamber into another chamber of the vacuum plant.

16. (Previously Amended) The apparatus as claimed in claim 9, wherein the coating chamber includes a first receiving capacity and the postheat treatment chamber includes a second receiving capacity for gas turbine blades, the second receiving capacity being greater than the first receiving capacity.

17. (Previously Added) The method of claim 1, wherein the minimum temperature ranges from about 900K to about 1400 K.

18. (Previously Added) The method as claimed in claim 2, wherein the application of the metallic coating to the gas turbine blade is effected in a coating region of the vacuum plant and the postheat treatment is effected in a postheat treatment region of the vacuum plant, the coating region and the postheat treatment region being different regions of the vacuum plant.

19. (Previously Added) The apparatus as claimed in claim 11, further comprising:

a cooling chamber, the cooling chamber being arranged downstream of the postheat treatment chamber and being connected to the postheat treatment chamber in a vacuum-tight manner.

20. (Previously Added) The apparatus as claimed in claim 11, wherein the vacuum-tight connection between the coating chamber and the postheat treatment chamber is produced via a lock chamber.

21. (Previously Added) The apparatus as claimed in claim 12, wherein the vacuum-tight connection between the coating chamber and the postheat treatment chamber is produced via a lock chamber.

22. (Previously Added) The apparatus as claimed in claim 11, wherein a heating device is provided in the lock chamber.

23. (Previously Added) The apparatus as claimed in claim 12, wherein a heating device is provided in the lock chamber.

24. (Previously Added) The apparatus as claimed in claim 19, wherein a heating device is provided in the lock chamber.

25. (Previously Added) The apparatus as claimed in claim 20, wherein a heating device is provided in the lock chamber.

26. (Previously Added) The apparatus as claimed in claim 21, wherein a heating device is provided in the lock chamber.

27. (Previously Added) The method as claimed in claim 5, wherein the metallic anti-oxidation coating is an MCrAlX alloy, where M stands for one or more elements of the group including iron, cobalt and nickel; Cr stands for chromium; Al stands for aluminum; and X stands for one or more elements of the group including yttrium, rhenium and the elements of the rare earths.

28. (Previously Added) The method as claimed in claim 7, wherein the metallic anti-oxidation coating is an MCrAlX alloy, where M stands for one or more elements of the group including iron, cobalt and nickel; Cr stands for chromium; Al stands for aluminum; and X

stands for one or more elements of the group including yttrium, rhenium and the elements of the rare earths.

29. (Previously Added) The apparatus as claimed in claim 11, wherein the vacuum-tight connection between the coating chamber and the preheating chamber is produced via a lock chamber.

30. (Previously Added) The apparatus as claimed in claim 12, wherein the vacuum-tight connection between the cooling chamber and the postheat treatment chamber is produced via a lock chamber.

31. (Previously Added) The apparatus as claimed in claim 29, wherein a heating device is provided in the lock chamber.

32. (Previously Added) The apparatus as claimed in claim 30, wherein a heating device is provided in the lock chamber.

33. (Currently Amended) A vacuum plant, comprising:

a coating chamber, wherein a gas turbine blade is coated with a metallic anti-oxidation coating while in a vacuum; and

a postheat treatment chamber, wherein the coated gas turbine blade is subjected to heat treatment while in a vacuum,

wherein a temperature of the gas turbine blade, after coating and before postheat

treatment, is at least equal to a minimum temperature which is ~~relatively~~ higher than at room temperature.

34. (Previously Added) The vacuum plant of claim 33, wherein the minimum temperature is about 500 K.

35. (Previously Added) The vacuum plant of claim 33, wherein the minimum temperature ranges from about 900K to about 1400 K.

36. (Previously Added) The vacuum plant of claim 33,, wherein the coating chamber and the postheat treatment chamber are connected in a vacuum tight manner.

37. (Previously Added) The vacuum plant of claim 36, further comprising:

a preheating chamber, the preheating chamber being arranged upstream of the coating chamber and being connected to the coating chamber in a vacuum-tight manner.

38. (Previously Added) The vacuum plant of claim 36, further comprising:

a cooling chamber, the cooling chamber being arranged downstream of the postheat treatment chamber and being connected to the postheat treatment chamber in a vacuum-tight manner.

39. (Previously Added) The vacuum plant of claim 37, further comprising:

a cooling chamber, the cooling chamber being arranged downstream of the postheat treatment chamber and being connected to the postheat treatment chamber in a vacuum-tight manner.

40. (Previously Added) The vacuum plant of claim 36, wherein the vacuum-tight connection between the coating chamber and the postheat treatment chamber is produced via a lock chamber.

41. (Previously Added) The vacuum plant of claim 36, further comprising:

a transfer system for the automatic transfer of the gas turbine blade from one chamber into another chamber of the vacuum plant.

42. (Previously Added) The vacuum plant of claim 37, further comprising:

a transfer system for the automatic transfer of the gas turbine blade from one chamber into another chamber of the vacuum plant.

43. (Previously Added) The vacuum plant of claim 38, further comprising:

a transfer system for the automatic transfer of the gas turbine blade from one chamber into another chamber of the vacuum plant.